



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,374	10/05/2004	David Hilton	5035-189US/P29,553USA	8757
7590 Richard C Woodbridge Synnestvedt Lechner & Woodbridge PO Box 592 Princeton, NJ 08542-0592	10/26/2007		EXAMINER TABATABAI, ABOLFAZL	
			ART UNIT 2624	PAPER NUMBER
			MAIL DATE 10/26/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/510,374	HILTON ET AL.	
	Examiner	Art Unit	
	Abolfazl Tabatabai	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 05 October 2004.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-15 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 05 October 2004 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

**DETAILED ACTION**

**Claim Rejections - 35 USC § 103**

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 5, 9-11, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meadow et al (U. S. 2003/0089764 A1) in view of Fernandez et al (U. S. 6,697,103 B1).

Regarding claim 1, Meadow discloses a method of detecting unauthorized copies of a genuine document, comprising the steps of:

(a) computing profiles of a printing characteristic derivable from a set of documents that are known or can be assumed to be largely genuine [page 3, paragraphs (0039) and (0040)], the characteristic being associated with the output of a printer that prints genuine documents and not being intrinsic to the original document [page 2, paragraph (0035)].

However, Meadow is silent about the specific details regarding the step of:

(b) analysing the profiles to assess the probability that any given document within the set, or additional to it, is in fact genuine.

In the same field of endeavor, however, Graham discloses document authentication method and apparatus comprises the step of:

(b) analysing the profiles to assess the probability that any given document within the set (column 5, lines 37-40), or additional to it, is in fact genuine (column 8, line 31).

It would have been obvious to a person of ordinary skill in the art at this time the invention was made to use analyzing the profiles to the access the probability that any given document is in fact genuine as taught by Graham in the system of Meadow because Graham provides Meadow an improved system which requires minimal hardware requirements and it is a preferred that the method can be carried out rapidly and accurately.

Regarding claim 5, Meadow discloses the method of claim 1 in which the characteristic is the configuration of pixels [page 4, paragraph (0062)].

Regarding claim 9, Meadow discloses the method of claim 1 in which profile related data is written into the document [page 2, paragraph (0020)].

Claim 10 is similarly analyzed as claim 1 above.

Regarding claim 11, Meadow is silent about the specific details regarding the method of claim 10 in which the document is a cheque.

In the same field of endeavor, however, Graham discloses document authentication method and apparatus comprises the document is a cheque (column 7, lines 3-6).

It would have been obvious to a person of ordinary skill in the art at this time the invention was made to use the document is a cheque as taught by Graham in the system of Meadow because Graham provides Meadow an improved system which

requires minimal hardware requirements and it is a preferred that the method can be carried out rapidly and accurately.

Regarding claim 13, Meadow discloses the method of claim 12 in which the document is currency, a driving license, ID, or a passport [page 3, paragraph (0038)].

Regarding claim 14, Meadow discloses the method of claim 1 in which the original is modified by including a special printed feature designed to facilitate profile comparison [page 2, paragraph (0020)].

3. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meadow et al (U. S. 2003/0089764 A1) and Graham et al (U. S. 6,764, 000 B1) as applied to claim 1 above and further in view of Hecht et al (U. S. 6,993,655 B1).

Regarding claim 6, Meadow and Graham are silent about the specific details regarding the method of claim 1 in which the characteristic is the orientation of glyphs. In the same field of endeavor, however, Hecht discloses record and related method for storing encoded information using overt code characteristics to identify covert code characteristics comprises the characteristic is the orientation of glyphs (column 2, lines 13-20).

It would have been obvious to a person of ordinary skill in the art at this time the invention was made to use the characteristic is the orientation of glyphs as taught by Hecht in the system of Meadow because Hecht provides Meadow an improved system for encoding information which cannot easily be copied or otherwise counterfeited.

4. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meadow et al (U. S. 2003/0089764 A1) and Graham et al (U. S. 6,764, 000 B1) as

applied to claim 1 above and further in view of Tsuji et al (U. S.5,515,451).

Regarding claim 7, Meadow and Graham are silent about the specific details regarding the method of claim 1 in which the profile is represented in a histogram. In the same field of endeavor, however, Tsuji discloses image-processing system for selectivity reproducing documents document comprises the profile is represented in a histogram (column 14, lines 48-55).

It would have been obvious to a person of ordinary skill in the art at this time the invention was made to use the profile is represented in a histogram as taught by Tsuji in the system of Meadow because Tsuji provides Meadow an improved system which is capable of detecting an illicit use rejecting document, which can be realized at a relatively low cost and is applicable for every type of image processing system.

Claim 8 is similarly analyzed as claim 7 above.

5. Claims 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meadow et al (U. S. 2003/0089764 A1) and Graham et al (U. S. 6,764,000 B1) as applied to claim 1 above and further in view of Fox (U. S. 2002/0044677 A1).

Regarding claim 12, Meadow and Graham are silent about the specific details regarding the method of claim 1 in which the original is accurately printed in a controlled environment and the profile is generated using occasional samples.

In the same field of endeavor, however, Fox discloses denomination identification comprises the original is accurately printed in a controlled environment and the profile is generated using occasional samples [page 1, paragraphs (0016) and (0017)].

Regarding claim 15, Meadow and Graham are silent about the specific details regarding the method of claim 1 comprising the steps of generating a mean value for several profiles and determining the distance from this mean of each of a large number of sample documents, so that any counterfeit documents in the sample fall outside of the distance distribution associated with authentic documents.

In the same field of endeavor, however, Fox discloses denomination identification comprises the steps of generating a mean value for several profiles [page 5, paragraphs (0103] and determining the distance from this mean of each of a large number of sample documents [page 1, paragraphs (0016) and (0017)], so that any counterfeit documents [page 6, paragraphs (0128] in the sample fall outside of the distance distribution [page 4, paragraphs (0077] associated with authentic documents [page 8, paragraphs (0162].

It would have been obvious to a person of ordinary skill in the art at this time the invention was made to use samples documents as taught by Fox in the system of Meadow because Fox provides Meadow an improved system for identifying the denomination of sample currency bills which comprises a selecting a number of bill features, which allow different denominations of currency bill to be distinguished.

#### Allowable Subject Matter

6. Claims 2-4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

## Contact Information

7. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to ABOLFAZL TABATABAI whose telephone number is (571) 272-7458.

The Examiner can normally be reached on Monday through Friday from 9:30 a.m. to 7:30 p.m. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Bhavesh Mehta, can be reached at (571) 272-7453. The fax phone number for organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abolfazl Tabatabai

Patent Examiner

Technology Division 2624

October 25, 2007

*AT-Tabatabai*